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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/600,084
Filing Date: June 20, 2003
Appellant(s): AMOS, JAMES A.

Larry B. Donovan
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 04/29/2009 appealing from the Office action mailed 10/01/2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

US2002/0085516	Bridgelall	7-2002
US2001/0010689	Awater et al.	8-2001
US2003/0119548	Mohammed	6-2003
US2001/0036835	Leedom, Jr.	11-2001

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claim 39 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described

in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claim 39, applicant claims "a network; a telephone controller coupled to the network; a wireless local area network access point coupled to the network…; a base station coupled to the network…" However, according to the filed drawings and specification (Fig. 3 and paragraphs 0036-0037 of published application), the access point and the base station are never disclosed as being coupled to the same network.

For examination purpose, the Examiner takes the disclosure of filed specification and drawing.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-9, 14-19 and 39-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bridgelall (US2002/0085516) in view of Awater et al. (US2001/0010689), Mohammed (US2003/0119548), and Leedom, Jr (US2001/0036835).

Regarding claim 1, Bridgelall teaches a wireless voice over Internet Protocol (VoIP) telephone, comprising:

a wireless handset (242 of Fig. 2) that comprises a wireless personal area network transceiver configured to communicate with a wireless personal area network, a wireless local

area network transceiver configured to communicate with a wireless local area network, and a selecting device for selecting between the wireless personal area network transceiver and the wireless local area network transceiver (Figs. 1-2, paragraphs 0011, 0026);

wherein the wireless handset is in voice communication with a telephone controller (MSC of Figs. 2 & 12), the controller is configured to communicate with a base station (106 of Fig. 1) coupled to the wireless personal area network and an access point (104 of Fig. 1) coupled to the wireless local area network (Fig. 1, paragraph 0026);

wherein the selecting device (SVR software driver, paragraph 0082) is configured to send a signal via the wireless local area network transceiver to route the voice communication for the wireless handset through the wireless local area network (Figs. 1 & 12-13, paragraphs 0011, 0065-0083, wireless handset sends SVR command that leads network controller to play an call transfer) responsive to the wireless personal area network transceiver being unable to detect a wireless personal area network connection (paragraph 0076); and

wherein the selecting device is configured to send a signal to route the voice communication for the wireless handset through the wireless personal area network responsive to reestablishing a connection with the wireless personal area network (Fig. 1, paragraphs 0026 & 0065, where network selection bases on user's preference).

But, Bridgelall does not expressly disclose send a signal to the controller via the personal area network transceiver to route the voice communication; and wherein the selecting device selects the wireless personal area network transceiver for routing the voice communication through the wireless personal area network when the wireless personal area network transceiver detects a

wireless personal area network connection, otherwise the selecting device selects the wireless local area network transceiver.

However, Bridgelall teaches initiating call re-route by the handset after detection of WLAN (paragraphs 0065, 0069-0070).

Awater et al. teach a wireless handset having selecting device to select connection between WLAN and WPAN, where WPAN is set as preferential connection (Fig. 1, paragraphs 0050-0054), which would have been obvious to one of ordinary skill in the art to recognize and modify the apparatus of Bridgelall into equipping both a WLAN transceiver and a WPAN transceiver, in corresponding to the wireless handset of Bridgelall having capability of roaming among WWAN, WLAN, and WPAN (paragraph 0026).

Mohammed teaches a subscriber device (12 of Fig. 1) enters and communicates with a wireless local area network (16 of Fig. 1) which causes a server/controller (24 of Fig. 1) to seamlessly re-route a call from a cellular network (15 of Fig. 1) to the wireless local area network (paragraphs 0055-0060, 0077, 0086). It would have been obvious to one of ordinary skill in the art to recognize the handoff of Mohammed as an alternative to the apparatus of Bridgelall and Awater et al. for shifting the burden in processing call re-route from the first/old wireless network to the second/new wireless network in case of severed connection.

Leedom teaches a system includes an UMMAD (universal multi-modal access device) that is capable of operating at different frequencies and different protocols to communicate with any one of a number of WBG (wide bandwidth gateway) coupled to a universal system traffic controller, which area each capable of communication using one or more of the protocols (abstract, Fig. 1). The wireless communication link with UMMAD would be handed off to

another WBG when the UMMAD loses connection with previous WBG (paragraphs 0050-0051), which is equivalent to unable to detect a wireless network in the aspect of UMMAD.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate having wireless handset signaling network controller for presence and routing of communication taught by Leedom, Jr. into apparatus of Bridgelall, Awater et al., and Mohammed, in order to provide direct call re-route initiation in case of going out of old wireless network's range.

Regarding claim 14, Bridgelall, Awater et al., Mohammed, and Leedom, Jr. teach a method for a wireless handset to send and receive voice over Internet Protocol using a wireless voice over Internet Protocol telephone as explained in claim 1 above, where Awater et al. teach mode detection (paragraphs 0054-0055).

Regarding claim 39, Bridgelall, Awater et al., Mohammed, and Leedom, Jr. teach a system as explained in response to claim 1 above.

Regarding claims 2 and 16, Bridgelall, Awater et al., Mohammed, and Leedom, Jr. teach the limitations of claims 1 and 14.
Bridgelall, Awater et al., Mohammed, and Leedom, Jr. teach a base station that comprises a wireless personal area network transceiver for communicating with the wireless personal area

network transceiver of the wireless handset (inherent in Awater et al.; 106 of Fig. 1 of Bridgelall).

Regarding claim 3, Bridgelall, Awater et al., Mohammed, and Leedom, Jr. teach the limitation of claim 2.

Bridgelall teaches the base station further comprising a network interface card, wherein the base station notifies a wireless local area network when a wireless personal area network signal from the wireless handset is not detected (paragraph 0011, where the same obviously applies to transfer between WPAN and WLAN).

Regarding claims 4 and 41, Bridgelall, Awater et al., Mohammed, and Leedom, Jr. teach the limitations of claims 2 and 39.

Bridgelall teach the wireless personal area network transceiver of the base station is a Bluetooth transceiver and the wireless personal area network transceiver of the wireless handset is a Bluetooth transceiver (paragraph 0026).

Regarding claim 5, Bridgelall, Awater et al., Mohammed, and Leedom, Jr. teach the limitation of claim 2.

Awater et al. teach the wireless personal area network transceiver of the base station is an infrared transceiver and the wireless personal area network transceiver of the wireless handset is a infrared transceiver (paragraph 0005, which would have been obvious to one of ordinary skill in the art to utilize an infrared connection instead of Bluetooth as design preference).

Regarding claim 6, Bridgelall, Awater et al., Mohammed, and Leedom, Jr. teach the limitation of claim 2.

Bridgelall teaches the controller is a phone controller that is communicatively coupled to at least one access point over a local area network, and to the base station (EGC of paragraph 0011).

Regarding claims 7, 19 and 42, Bridgelall, Awater et al., Mohammed, and Leedom, Jr. teach the limitations of claims 1, 18 and 39.

Awater et al. teach the wireless local area network transceiver is an 802.11x transceiver (128 of Fig. 1).

Regarding claim 8, Bridgelall, Awater et al., Mohammed, and Leedom, Jr. teach the limitation of claim 1.

Awater et al. teach the wireless personal area network transceiver is an infrared transceiver (paragraph 0005 of Awater et al., which would have been obvious to one of ordinary skill in the art to utilize an infrared connection instead of Bluetooth as design preference).

Regarding claims 9 and 17, Bridgelall, Awater et al., Mohammed, and Leedom, Jr. teach the limitations of claims 1 and 16.

Awater et al. teach the wireless personal area network transceiver is a Bluetooth transceiver (130 of Fig. 1).

Regarding claim 15, Bridgelall, Awater et al., Mohammed, and Leedom, Jr. teach the limitation of claim 14.

Bridgelall teaches wherein the wireless local area network transceiver is at a remote location and communicatively coupled to the base station (paragraph 0011).

Regarding claim 18, Bridgelall, Awater et al., Mohammed, and Leedom, Jr. teach the limitation of claim 16.

Bridgelall teaches authenticating the wireless handset by the base station (paragraph 0032).

Regarding claim 40, Bridgelall, Awater eta l., Mohammed, and Leedom, Jr. teach the limitation of claim 39.

Bridgelall, Awater eta l., Mohammed, and Leedom, Jr. teach wherein the wireless handset communicates Voice over Internet Protocol compatible packets with the telephone controller (obvious as packets going to indoor system server of Mohammed through IP networks).

Regarding claim 43, Bridgelall, Awater eta l., Mohammed, and Leedom, Jr. teach the limitation of claim 39.

Bridgelall, Awater eta l., Mohammed, and Leedom, Jr. teach wherein the telephone controller communicates with the base station using an Internet Protocol compatible protocol and the telephone controller communicates with the wireless local area network access point using an Internet Protocol compatible protocol (obvious as packets going to indoor system server of Mohammed through IP networks).

(10) Response to Argument

Appellant's arguments with respect to 35 U.S.C. 112, 1st paragraph rejection on claim 39 have been fully considered but they are not persuasive.

(Claim 39) The appellant argued that paragraph 0018 of the published application does have support for claiming "...a network; a telephone controller coupled to the network; a wireless local area network access point coupled to the network and configured to communicate with the telephone controller via the network...", where the backbone is the network that both the access point and the base station are coupled to.

In response to the argument, the examiner respectfully disagrees. Although the summary section of filed specification (paragraph 0018) discloses that "... and a base station having a network interface card and a wireless personal area network transceiver, an access point, and a controller communicatively coupled to the base station and to the access point via a local area network...", it could be interpreted as each of the access point and the base station connects to one local area network because they both are equipped with a local area network transceiver (obviously not the same local area network transceiver). Yet, the one local area networks each of the access point and the base station coupled to are apparently not the same local area network because Fig. 3 and paragraphs 0036-0037 of published application further explains the detail of the summary. As Fig. 3 shown, the access point (304) connects to the controller (302) via a backbone (306), and the base station (200) connects to the controller (302) via a local area network (308), which shows that 306 and 308 are different. Also, in detailed description, paragraph 0036 states that "Backbone 306 may be any standard network, well

known in art, including but not limited to a LAN, a WAN, an Ethernet, an Internet, an Intranet, or a combination of these or other networks…", and paragraph 0037 states "As the Voice-over-Internet-Protocol packets arrive at the phone controller 302, they are directed either over a wired local area network connection 308 to the base station 200, or routed to the access point 304 via the backbone 306", where 306 and 308 are disclosed as different networks. So, if 306 and 308 of Fig. 3 are indeed the same network as applicant argued to be, the filed specification would not address them differently as one being any kind of standard network (not necessarily a LAN) while the other being a wired local area network. Thus, the filed specification does not support having both the access point and the base station connect to the same network and communicate with the telephone controller via the same network. Though applicant argued that "… the base station 200 is connected with the backbone via the controller 302" (page 20, lines 10-11 of appeal brief), claim 39 claims otherwise, as "a wireless local area network *access point* coupled to the network and configured to *communicate with the telephone controller via the network…* a *base station* coupled to the network and configured to the *communicate with the telephone controller via the network…*" Therefore, the claim indeed contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention.

Thus, the 112 1st paragraph rejection is proper and maintained.

Appellant's arguments in with respect to Bridgelall (US2002/0085516), Awater et al. (US2001/0010689), Mohammed (US2003/0119548), and Leedom, Jr. (US2001/0036835) on claims 1-9, 14-19 and 39-43 have been fully considered but they are not persuasive.

(Claims 1, 14 and 39) The appellant argued that neither Bridgelall, Awater, Mohammed, nor Leedom, alone or in any combination, teach a wireless handset sending a signal responsive to the wireless personal area network transceiver being unable to detect a wireless personal area network connection to send a signal via the wireless local area network transceiver to route the voice communication for the wireless handset through the wireless local area network. In any of the references, the signals for controlling the routing originate within the network, not from the roaming wireless handset as in the present claims.

In response to the argument, the examiner respectfully disagrees. In the appeal-brief, applicant has referred the mobile device of Bridgelall as a wireless headset. Despite whether it is a typo in the appeal-brief, the examiner has to indicate that the mobile device of Bridgelall is a wireless handset, which is a different device. In fact, Bridgelall mention "BluetoothTM Headset" only once in Fig. 2. The wireless handset Bridgelall focuses on is a dual mode radio (242 of Fig. 2, paragraph 0033).

Despite applicant's further analysis, the claim language does not necessarily limit any control or initiation command over the whole process of routing voice communication by the wireless handset. The claim limitation, "... send a signal to the telephone controller... to route the voice communication..." could be interpreted as sending a signal to the telephone controller for registration or indication of presence in a network. It could still be the telephone controller

that controls or initiates routing the voice communication based on POP (point of presence) of the wireless handset.

In contrast to applicant's argument, Bridgelall does teach having the wireless handset to send a signal to the network controller to route a call through another network (Figs. 12-13, paragraphs 0065-0083), where Bridgelall discloses "the decision to ram from WWAN to WLAN will be based on the availability of a WLAN network and the user's preference. If the preference is to connect via WLAN… then the terminal will issue the SVR command…" It shows that the wireless handset of Bridgelall does have a selecting means (or SVR software driver, paragraph 0082) to track and decide network for roaming (obviously include network reestablishment), and does signal the network controller for roaming with a SVR command (paragraphs 0065, 0069, 0075-0077), especially when there is no WWAN coverage (paragraph 0076, same as unable to detect a wireless network). In practice, Bridgelall discloses that the wireless handset prefers network with low power consumption such as WLAN in comparing to WWAN (paragraph 0047). Despite applicant's argument of paragraph 0069 of Bridgelall, Bridgelall expressly discloses that it is the wireless handset who requests the gateway play an ECT (explicit call transfer) command to the network (paragraphs 0011, 0077-0078). Besides, applicant's claim does not limit the transceiver to be the one who takes over the call, initiates the transfer. In term of network environment, Bridgelall teaches having a WLAN access point (202 of Fig. 2) and a WWAN base station (226 of Fig. 2) coupled to a network controller (204 or 205 of Fig. 2 that routes voice communication) either directly or indirectly. So, Bridgelall does teach the argued limitation.

However, Bridgelall does not expressly disclose the network environment of roaming or handoff between a wireless personal area network (WPAN) and a wireless local area network (WLAN) though Bridgelall discloses the seamless vertical roaming (SVR) among WWAN, WLAN, and WPAN (paragraph 0026). The roaming of Bridgelall is a handoff that sends signal for roaming request via old network before breaking with the old network, which is different from the handoff in the claims. Nevertheless, these are obvious features taught in Awater, Mohammed, and Leedom, in which one of ordinary skill in the art at the time the invention was made, would have obviously recognized and combined into the apparatus of Bridgelall to yield predictable results.

Awater teaches a wireless handset that equips with both a wireless personal area network transceiver (114 of Fig. 1) and a wireless local area network transceiver (112 of Fig. 1). Awater further discloses the wireless handset has selecting means to sense network presence and to make decision for mode switching (paragraphs 0053-0056). Unlike applicant's argument, corresponding to Bridgelall's teaching in seamless vertical roaming among WWAN, WLAN, and WPAN, it would have been obvious to one of ordinary skill in the art at the time the invention was made to recognize wireless transceiver equipment of Awater and modify the apparatus of Bridgelall into having both WLAN transceiver and WPAN transceiver for seamless vertical roaming among the different wireless networks.

Mohammed teaches a wireless handset (12 of Fig. 1) roaming between licensed wireless network (cellular network, aka WWAN) and unlicensed wireless network (Bluetooth, aka WPAN; IEEE 802.11, aka WLAN) (16 of Fig. 1, paragraph 0040), wherein both wireless networks are either directly or indirectly coupled to a system controller (24 of Fig. 1). As

explained earlier, applicant's claim does not limit that the signal sent by the wireless handset has to be a control or initiation command of call routing. And, Mohammed teaches that the wireless handset signals its presence when enters the unlicensed wireless network (paragraph 0055) and the system server initiates call routing once logs presence of the wireless handset (paragraphs 0058-0060), which includes using VOIP techniques (paragraph 0077). So, Mohammed in a way also teaches the argued limitation. Despite applicant's argument on whether maintaining old connection during call transfer, Mohammed teaches a handoff method, wherein the wireless handset roams communication directly to the new wireless network without handing off via the old wireless network (paragraph 0086). And the handoff of Mohammed obviously shows that the wireless handset would be able to initiate call routing to the new wireless network even if the old wireless network connection is severed because there is no need to communicate via the old wireless network. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to recognize and incorporate the handoff feature of Mohammed into the apparatus of Bridgelall and Awater for shifting the burden of initiating call re-route to the new wireless network as an alternative handoff in case of severed wireless connection with old wireless network.

In contrast to applicant's argument, Leedom's teaching does not teach away from claims 1, 14 and 39, but rather closer in teaching the claims. Leedom teaches a system includes an UMMAD (universal multi-modal access device) that is capable of operating at different frequencies and different protocols to communicate with any one of a number of WBG (wide bandwidth gateway), which area each capable of communication using one or more of the protocols (abstract). The communication link may be switched from one WBG to another or

from one protocol to another during a communication session to continue the session under the control of a universal system traffic controller (abstract, Fig. 1), wherein wireless personal area network is one of the preferred WBG in term of low power consumption and low cost (paragraphs 0010, 0023, 0061). Leedom teaches that the UMMAD is capable to configure itself to operate over any one of the available wireless service networks in order to reconnect a lost communication session (paragraph 0049). The wireless communication link with UMMAD would be handed off to another WBG when the UMMAD loses connection with previous WBG (paragraphs 0050-0051), which is equivalent to unable to detect a wireless network in the aspect of UMMAD. Again, despite applicant's argument on the universal system traffic controller being the one who re-routes the voice communication, the claims only limit the wireless handset to notify the telephone controller (e.g. universal system traffic controller) its presence in a different wireless network, so that the telephone controller can route the voice communication. Yet, Leedom teaches such feature, in which the UMMAD has a "follow-me" capability, such that the universal system traffic controller routes the voice communication to wireless network where the UMMAD signals its presence (paragraphs 0043-0046, 0065), which is too a handoff that fits the claim limitations without communicating with the old wireless network for re-routing voice communication. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the seamless roaming feature of Leedom into the apparatus of Bridgelall, Awater, and Mohammed, in order to directly roam voice communication among wireless local area network and wireless personal area network in response to old wireless network connection loss (in aspect of wireless handset) or handset

presence detection (in aspect of telephone controller) without the burden of communicating via the old wireless network.

Further in response to part B argument starts at page 27 of appeal-brief, the examiner has explained above to the repeated arguments raised by applicant toward the 112 1st paragraph rejection and the 103 rejection in view of Bridgelall, Awater, Mohammed, and Leedom.

Still further in response to part C arguments starts at page 29 of appeal-brief, the examiner has explained above to the repeated arguments raised by applicant toward the 103 rejection in view of Bridgelall, Awater, Mohammed, and Leedom. Bridgelall, Awater, Mohammed, and Leedom all teach a multi-mode wireless handset that has selecting means for roaming among different wireless networks based on the wireless handset's own preference, SVR software driver, or aka selecting means. As explained earlier, in corresponding to Bridgelall's teaching in having VOIP communication roaming among WWAN, WLAN, and WPAN, the device and handoff features of Awater, Mohammed, and Leedom would have been obvious to one of ordinary skill in the art to recognize as known techniques to be incorporated into the system of Bridgelall ready for improvement to yield predictable results, such as equipping both WLAN transceiver and WPAN transceiver for communication and roaming among WLAN and WPAN, and using handoff with "follow-me" (or point-of-presence) feature as an alternative handoff method to realize roaming into another network in benefit of maintained voice communication in case of the wireless handset is out of the old/first wireless network's range.

Thus, Bridgelall, Awater, Mohammed, and Leedom in combination do teach the argued claims 1, 14 and 39. The rejections are proper and maintained.

For the above reasons, it is believed that the rejections should be sustained.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

Respectfully submitted,

/ Zhiyu Lu/

Art Unit 2618

Conferees:

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/Nay A. Maung/

Supervisory Patent Examiner, Art Unit 2618 (signed for Urban, Edward)

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